

WHAT IS CLAIMED IS:

1. A semiconductor device comprising:
 - a substrate having an electrode pad;
 - a first semiconductor chip mounted on the substrate with a first adhesion layer
 - 5 interposed therebetween;
 - a second semiconductor chip mounted on the first semiconductor chip with a second adhesion layer interposed therebetween and having an electrode pad on an upper surface thereof;
 - a wire for bonding the electrode pad of the substrate and the electrode pad of the
 - 10 second semiconductor chip to each other; and
 - a mold resin sealing therein the first and second semiconductor chips and the wire,
 - the first adhesion layer having a peripheral edge portion protruding outwardly from the first semiconductor chip,
 - the second semiconductor chip having a peripheral edge portion protruding
 - 15 outwardly beyond a peripheral edge portion of the first semiconductor chip.
2. The semiconductor device of claim 1, wherein the peripheral edge portion of the second semiconductor chip is protruding outwardly beyond the peripheral edge portion of the first adhesion layer.
3. The semiconductor device of claim 1, wherein a center of the second
- 20 semiconductor chip is offset from a center of the first semiconductor chip.
4. The semiconductor device of claim 3, wherein the center of the second semiconductor chip is offset from the center of the first semiconductor chip in a direction of an edge of the peripheral edge portion of the first adhesion layer which is protruding most outwardly from the first semiconductor chip.
- 25 5. The semiconductor device of claim 3, wherein the center of the second

semiconductor chip is offset from the center of the first semiconductor chip in a direction of an edge of the peripheral edge portion of the first adhesion layer which has a largest surface height from the substrate.

6. The semiconductor device of claim 3, wherein the center of the second semiconductor chip substantially coincides with a center of the substrate.

7. A method for fabricating a semiconductor device, the method comprising:

a first step of disposing a first semiconductor chip on a substrate having an electrode pad;

a second step of injecting an adhesive in a space between the substrate and the first semiconductor chip to form a first adhesion layer composed of the adhesive and having a peripheral edge portion protruding outwardly from the first semiconductor chip;

a third step of mounting, on the first semiconductor chip, a second semiconductor chip having an electrode pad on a peripheral edge portion of an upper surface thereof with a second adhesion layer interposed therebetween;

a fourth step of bonding the electrode pad of the substrate and the electrode pad of the second semiconductor chip to each other with a wire; and

a fifth step of sealing the first and second semiconductor chips and the wire with a mold resin,

the third step including the step of protruding a peripheral edge portion of the second semiconductor chip outwardly beyond a peripheral edge portion of the first semiconductor chip.

8. The method of claim 7, wherein the third step includes the step of protruding the peripheral edge portion of the second semiconductor chip outwardly beyond the peripheral edge portion of the first adhesion layer.

9. The method of claim 7, wherein the first step includes the step of disposing the

first semiconductor chip such that a center of the first semiconductor chip is offset from a center of the substrate in a direction of an edge of the first semiconductor chip opposite to a direction of an edge thereof from which the adhesive is injected in the second step.

10. The method of claim 7, wherein the third step includes the step of mounting
5 the second semiconductor chip such that a center of the second semiconductor chip is offset from a center of the first semiconductor chip.

11. The method of claim 10, wherein the third step includes the step of mounting
the second semiconductor chip such that the center of the second semiconductor chip is
offset from the center of the first semiconductor chip in a direction of an edge of the first
10 semiconductor chip from which the adhesive is injected in the second step.

12. The method of claim 7, wherein the third step includes the step of mounting
the second semiconductor chip such that a center of the second semiconductor chip
substantially coincides with a center of the substrate.